NOTES ON SOME LAMELLICORN BEETLES FROM SOUTH AND EAST AFRICA, WITH DESCRIPTIONS OF NEW SPECIES.

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THE following pages contain descriptions of a few of the more interesting of the Lamellicornia from South and East Africa remaining unnamed in the British Museum collection, together with notes on some related forms.

MELOLONTHINAE.

Genus **Trichinopus** Waterh. (1875).

The genus *Trichinopus* is one of several S. African Melolonthine genera of which the females are still undiscovered. They are probably of subterranean habits and no doubt in most cases without functional wings. The two previously named species have both been described from single male specimens. Of the two here described I have examined 19 male examples in all. The genus seems to be peculiar to Western S. Africa. It is chiefly remarkable for the extremely slender hind tarsi and the very long radiating hairs with which they are decorated.

T. titania Pér. (1907) is unknown to me. The description is inadequate, but as the elytra are pale yellow and the antennal club dark it is evidently not one of the forms in the British Museum collection.

1. **Trichinopus rufescens,** sp. nov.

Ferrugineo-rufus, vertice nigro elytrorumque margine externo plerumque paulo infuscato ; modice angustus, pilis griseis longissimis vestitus ; capite rugose punctato, clypeo haud brevi, fortiter punctato, antice rotundato, sutura fere recta ; pronoto nitido, punctis nonnullis setiferis inaequalibus sparsuto ; elytris rugoso-punctatis ; tibia postica brevi, apice sat lato, calcare majori longitudine metatarsi dimidio aequali, antennarum clava longitudine stipite aequali, hujus articulo 4 brevissimo.

Long. 9–10 mm. ; lat. 4–4·5 mm.

S.-W. Africa : Okahandja (R. E. Turner, Dr. K. Jordan, Dec., Jan.).

13 specimens, all males.

This species is a little deeper in colour and rather more robustly built than *T. flavipennis* Waterh. (1875). The clypeus is rounded in front and not excised and its suture is well marked and almost straight. The elytra are shorter, darker in colour and less smooth and shining. The hind legs are less slender than in the type-species, the tibia broader at the end and the longer tibial spur half as long as the basal joint of the tarsus. The club of the antenna is red, a very little longer than that of *T. flavipennis*, and the footstalk is a little shorter.

2. **Trichinopus picipennis,** sp. nov.

Rufus, capite, antennarum clava elytrisque piceis ; modice angustus, pilis griseis longissimis vestitus, capite rugoso, clypeo haud brevi, antice rotundato,

sutura recta ; pronoto nitido, punctis setiferis nonnullis inaequalibus sparsuto ; elytris rugoso-punctatis ; tibiis posticis brevibus, apice latis, calcaribus modice longis, antennarum clava stipite multo longiora, hujus articulo 4 brevissimo.

Long. 8–9 mm. ; lat. 4 mm.

S.W. AFRICA : Otavifontein (K. Jordan, Nov.), Otjosongombe, Waterberg, 1600 m. (K. Jordan, Nov.).

Like *T. rufescens*, this is less slender and delicately built than *T. flavipennis*, the clypeus is rather longer than that of either, its front margin rounded and the frontal suture straight, as in *T. rufescens*. The club of the antenna, besides being almost black, is markedly longer than in *flavipennis* and *rufescens* and the third and fourth joints of the footstalk are very short, as in *rufescens*. The hind tibia, although not quite so stout as that of *rufescens*, is more so than in *flavipennis*, the length of the tibial spurs is intermediate and the hind tarsi are a little shorter than in *flavipennis*. The abdomen, as in *T. rufescens*, is clothed with very long hairs.

3. **Oedanomerus longicornis**, sp. nov.

♂. Rufus, capite antennarumque clava nigris, corpore supra setis albis squamiformibus tecto, capite tricarinato, carinis postice longe ciliatis, clypeo antice angulato ; pronoto leviter ruguloso, lateribus medio obtuse angulatis, antice et postice convergentibus, angulis anticis obtusis, posticis nullis ; elytris haud costatis, ubique punctis minutis setiferis sparsutis, setis angustis, postice acuminatis ; antennarum clava longissima ; pedum intermediorum et posticorum tarsis longissimis.

Long. 8–9 mm. ; lat. 3·5 mm.

N.-W. RHODESIA : Livingstone, R. Zambesi (H. C. Dollman, Feb.).

This second species of the genus *Oedanomerus* has a close resemblance to the typical form, *O. hirsutus* Waterh. (1875), but can be immediately distinguished by the much longer club of the antenna in the male (the only sex known of either species), which is much longer than the footstalk and about twice the length of that of *O. hirsutus*. The organ consists of 9 distinct joints instead of 8 and the club is black instead of light brown. In addition *O. longicornis* has the pronotum rather less abruptly narrowed in front and without the smooth bare patch near the base found in the other species. The elytra are without the distinct smooth costae, and the white setae with which they and the pronotum are clothed are less flat and scalelike. The elytral scales of *O. hirsutus* are blunt at the posterior end and sometimes bifurcated, while those of *O. longicornis* are very sharply pointed. The middle and hind tarsi are longer than those of *O. hirsutus*.

DYNASTINAE.

4. **Pseudocyphonistes laevis**, sp. nov.

Nigro-piceus, corpore subtus rufescenti et partim rufo-hirto ; ornatus, nitidus, supra laevis, capite cornu brevi leviter bicuspidato armato, clypeo rugoso, truncato, vertice laevi ; pronoto laevi, antice medio irregulariter haud fortiter rugose punctato, lateribus arcuatis, paulo deplanatis et rugulosis, angulis anticis acutis, posticis fere obsoletis ; scutello antice leviter punctato ; elytris parce et minute punctatis, postice fere impunctatis, ab humeris fere ad apicem

ampliatis ; pygidio laevi, angulis lateralibus leviter punctulatis et longe ciliatis ; corpore subtus longe, haud dense rufo-hirsuto, medio fere nudo.

Long. 35 mm. ; lat. max. 19 mm.

Cape Province : Grahamstown.

There are two male specimens in the Museum collection.

In all its essential characters *P. laevis* is closely similar to *P. corniculatus* Burm. (1847), but it is darker in colour, more smooth and shining above and of less regular oval shape. The pronotum is relatively narrower and the elytra are relatively longer than in that species. The clypeus is concave and closely rugulose, as in *P. corniculatus*, and the short horn is of exactly similar shape (transverse and feebly bilobed), but the clypeus is broader in front and the anteocular ridge is narrow and nearly straight, oblique and rather prominent at the end. The pronotum is extremely smooth upon its posterior half and the anterior half bears only scanty and unequally distributed punctures or rugosity, especially in the middle and on each side at a distance from the outer margins. The elytra increase a little in width from the base almost to the extremity and, in addition to a row of punctures bordering the suture on each side, show only minute scattered punctures in the inner anterior region. The pygidium is very smooth, with a few hairs at the base and in the angles, and the lower surface and legs are much less hairy than in the other species.

5. **Heteronychus jacki**, sp. nov.

Niger, nitidus, parum late ovalis, capite subtiliter ruguloso, postice laevi, clypeo antrorsum attenuato, margine antico reflexo, medio angulato, fronte ab clypeo linea subtiliter impressa diviso ; pronoto vix perspicue punctato, lateribus fortiter arcuatis, marginatis, angulis posticis nullis ; elytris fortiter striatis, striis bene punctatis, 4 et 5 postice, 6 et 7 antice abbreviatis, intervallo secundo antice lato, haud punctato ; pygidio antice crebre sat minute ruguloso et punctato, postice laevi ; tibiis anticis inaequaliter 5-dentatis, dentibus 3 et 5 minutis, obtusissimis :

♂, tarsis anticis brevibus, crassis, ungue interiori lato ; ♀, pygidio obtuse bituberculato, intra tuberculos impresso.

Long. 9–10·5 mm. ; lat. max. 5–5·5 mm.

Kenya : Meru (Dr. Van Someren, May, June) ; Marok, Masai Reserve (A. O. Luckman, Feb., March).

This is nearly related to the very common *H. arator* F. (1792), but distinctly smaller. The clypeus is less strongly narrowed in front and its sides are less sinuated. The stridulatory bands of the propygidium are broader and less finely ridged than in *H. arator*. The species is easily recognisable in the female by the curious hollowing of the pygidium in the middle, leaving a rounded boss on each side. Upon p. 417 of his *Revision* of the genus *Heteronychus* (*T.E.S.*, 1923) Mr. Jack has mentioned 2 female specimens from Masai Reserve, Kenya, which he provisionally refers to *H. arator*, but which evidently belong to the present species. The British Museum contains a pair from Marok in the same territory. The aedeagus of the male differs markedly from that of *H. arator*. The paramera are strongly angulated laterally close to the tip and not abruptly widened at the base.

A species of *Heteronychus* from Somaliland has recently been described and figured by Paoli under the name of *H. sacchari* (*Boll. Soc. Ent. Ital.*, lxvi, 1934,

p. 47). The author has unfortunately overlooked the fact that an Indian species of the genus was given this name by myself in 1908 (*Trans. Ent. Soc. Lond.*, p. 329). In the catalogue of *Dynastidae* which I am preparing for publication the Somaliland species will be called **H. paolii**, n. nov.

CETONIINAE.

6. **Scaptobius zulu**, sp. nov.

Fusco-niger, opacus, sparse et minute griseo-setosus, clypei margine antico rotundato, verticis medio valde elevato, conico ; pronoto antice lato, postice fortiter angustato, supra minute transversim rugulato, angulis posticis longe productis, baseos medio leviter emarginato ; elytris subtiliter longitudinaliter striolatis, costis utrinque duabus perpaulo elevatis, postice connexis : abdominis segmento penultimo utrinque tuberculato, pygidio irregulariter varioloso, antice medio carinato, marginibus externis elevatis.

Long. 11 mm. ; lat. 5 mm.

S.-E. AFRICA : Zululand (Gerrard).

A single specimen of this species has been in the British Museum since 1863. It bears a note stating that it was taken in an ants' nest together with *Paussus cucullatus* Westw. (1849).

The species is nearly related to *S. natalensis* Boh. (1857) and *S. aciculatus* Schaum (1841), but is rather larger than either and differs also by its conically protuberant forehead and strongly dilated prothorax, forming a link in those respects with *S. caffer* Schaum (1841) and *S. carinifrons* Moser (1918). The clypeus is rounded at the front margin but is not limited by a carina behind, as in *S. aciculatus*. The pronotum is finely transversely rugulose, very broad in front, with strongly produced hind angles. The elytra bear numerous fine longitudinal scratches, between which two faint costae uniting before the extremity are traceable on each. The last abdominal spiracles are strongly elevated and the pygidium has a median carina upon its anterior part and is slightly hollowed on each side. The front tibia is strongly produced but very blunt at the extremity, and all the tarsi are rather long and slender, consisting of five joints differing little in length.

7. **Plagiochilus angustatus** Westw. (1894).

Plagiochilus intrusus Wasm. (1900), described by Péringuey and Wasmann almost simultaneously from the same series of specimens collected at Salisbury, Rhodesia, proves to be a very wide-ranging species. It has been found in Nyasaland, in Tanganyika and Uganda, and extends right across the African continent, for it cannot be separated from the West African *P. angustatus* Westw. (as *Coenochilus*). It probably occurs wherever its host, the ant *Plagiolepis custodiens* Smith (1858) is found. The genus *Plagiochilus* Wasm. (1900) is very nearly related to *Aspilus* Westw. (1848).

Cyclidiosoma Janson (1911) is a synonym of *Lissogenius* Schaum (1844). The remarkable structure of the front tarsus, which Janson described as six-jointed, is a feature of that genus and is more correctly described by Westwood as strangulation of the last joint. Although it appears to allow a lateral movement between the two halves, there is quite evidently no true sixth joint.